

Notice of Allowability

Application No.

09/937,665

Applicant(s)

KUTCHAN ET AL.

Examiner

Art Unit

Brendan O. Baggot

1638

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Interview of 9/21/06.
2. ☒ The allowed claim(s) is/are 1,2,4-19,43-45,59 and 63-67.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|---|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input checked="" type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date <u>9/21/06</u> . |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____. |

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Paul Burgess on 9/21/06.

The Application is amended as follows:

In the Claims:

--- Claim 10 (currently amended): An isolated and purified polynucleotide encoding a codeinone reductase enzyme from *Papaver somniferum*, selected from the group consisting of:

the polynucleotide sequence of SEQ ID NO: 20;

a polynucleotide sequence which hybridizes under stringent conditions to complementary sequences of SEQ ID NO: 20, wherein said polynucleotide sequence is at least 95% identical to SEQ ID NO: 20; and

a polynucleotide sequence which is an allele of SEQ ID NO: 20, wherein said polynucleotide sequence is at least 95% identical to SEQ ID NO: 20; wherein said polynucleotide codes for a codeinone reductase enzyme which has codeinone reductase activity. ---

--- Claim 59 (currently amended): The isolated polynucleotide sequence encoding codeinone reductase comprised in microbial deposit DSM 12737. ---

--- Claim 65 (currently amended): A method for transfecting or transforming a plant, comprising transfecting or transforming a plant cell, plant part, or plant with a polynucleotide sequence which hybridizes under stringent conditions to the complementary sequences of SEQ ID NO: 20, wherein said polynucleotide sequence is at least 95% identical to SEQ ID NO: 20, and wherein said polynucleotide codes for a codeinone reductase enzyme which has codeinone reductase activity. ---

--- Claim 66 (currently amended): A method for transfecting or transforming a plant, comprising transfecting or transforming a plant cell, plant part, or plant with a polynucleotide sequence which is an allele of SEQ ID NO: 20, wherein said polynucleotide sequence is at least 95% identical to SEQ ID NO: 20, and wherein said polynucleotide codes for a codeinone reductase enzyme which has codeinone reductase activity. ---

--- Claim 67 (currently amended): [A] An isolated polynucleotide sequence which contains at least 95% homology to SEQ ID NO: NO: 20 and wherein said polynucleotide codes for a codeinone reductase enzyme which has codeinone reductase activity. ---

The following is an examiner's statement of reasons for allowance:

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Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

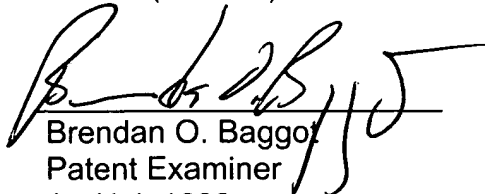
Claims 17-19 directed to plasmids are enabled and described in light of Applicants submission of commercial catalog pages from commercial suppliers: Stratagene for pCALC-c, Promega for pGEM-T, and Invitrogen for pFastBac 1.

Claims 1,2, 4-19,43-45, 59 and 63-67 are allowed.

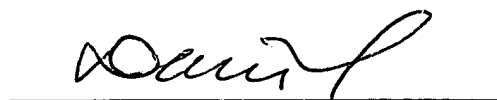
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brendan O. Baggot whose telephone number is 571/272-5265. The examiner can normally be reached on Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anne Marie Grunberg can be reached on 571/272-0975. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Brendan O. Baggot
Patent Examiner
Art Unit 1638



David T. Fox
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bob